FIG. 1

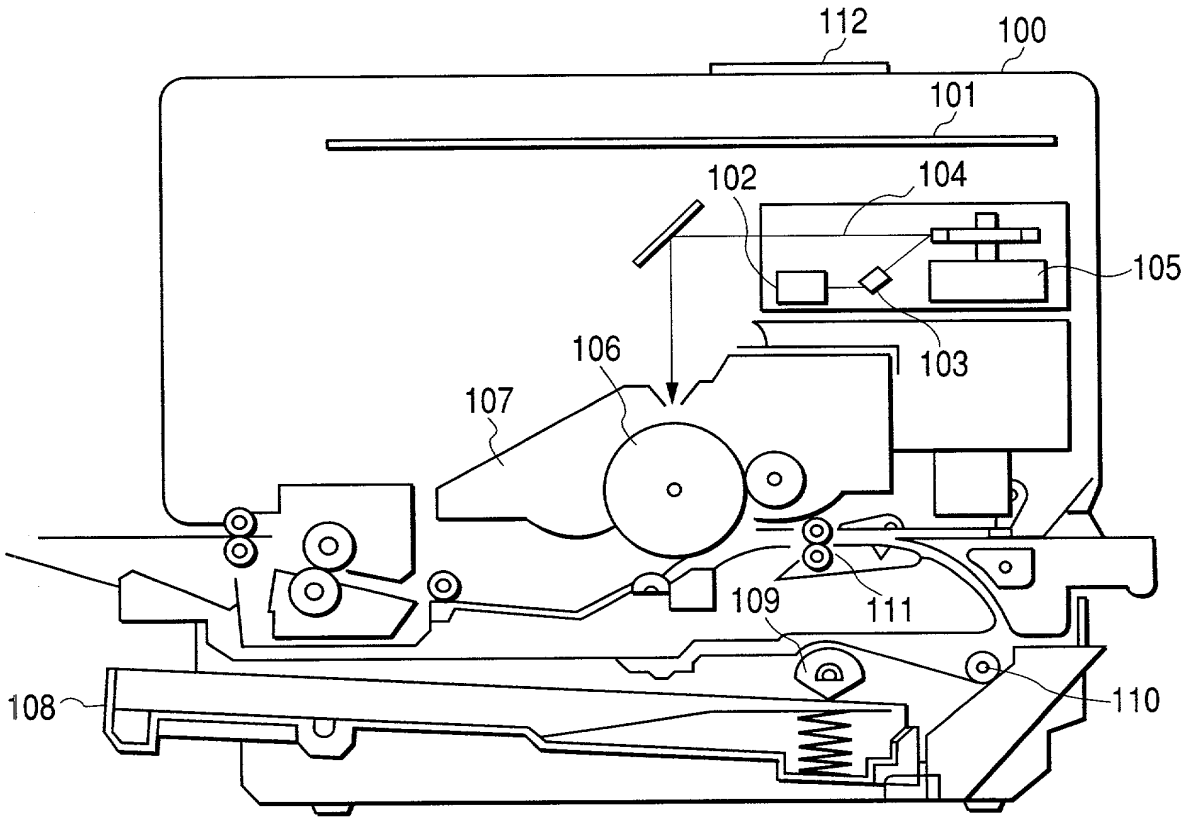


FIG. 2

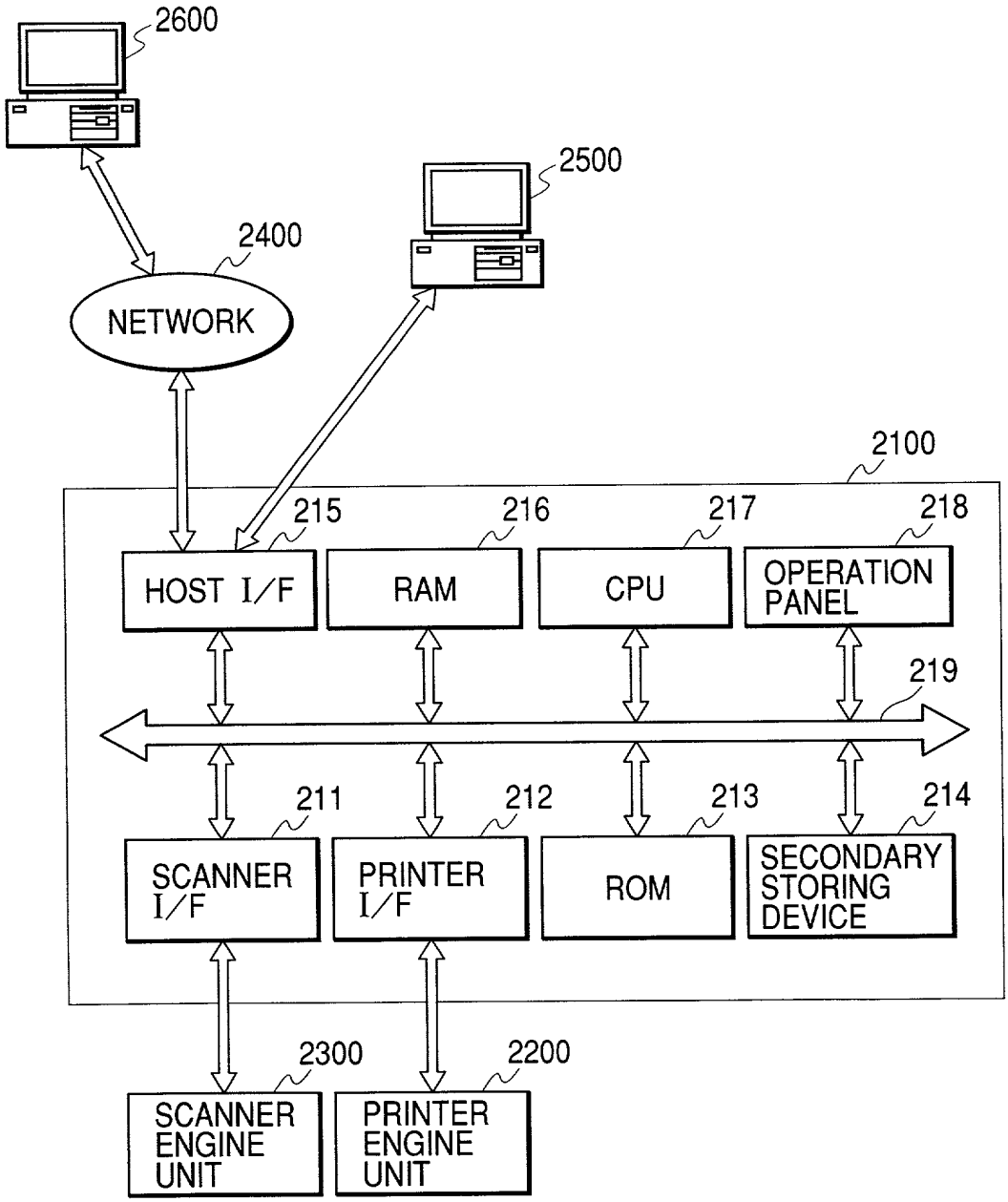

2600
2500
2400
NETWORK
2100
215
216
217
218
HOST I/F
RAM
CPU
OPERATION PANEL
219
211
212
213
214
SCANNER I/F
PRINTER I/F
ROM
SECONDARY STORING DEVICE
2300
2200
SCANNER ENGINE UNIT
PRINTER ENGINE UNIT

FIG. 3

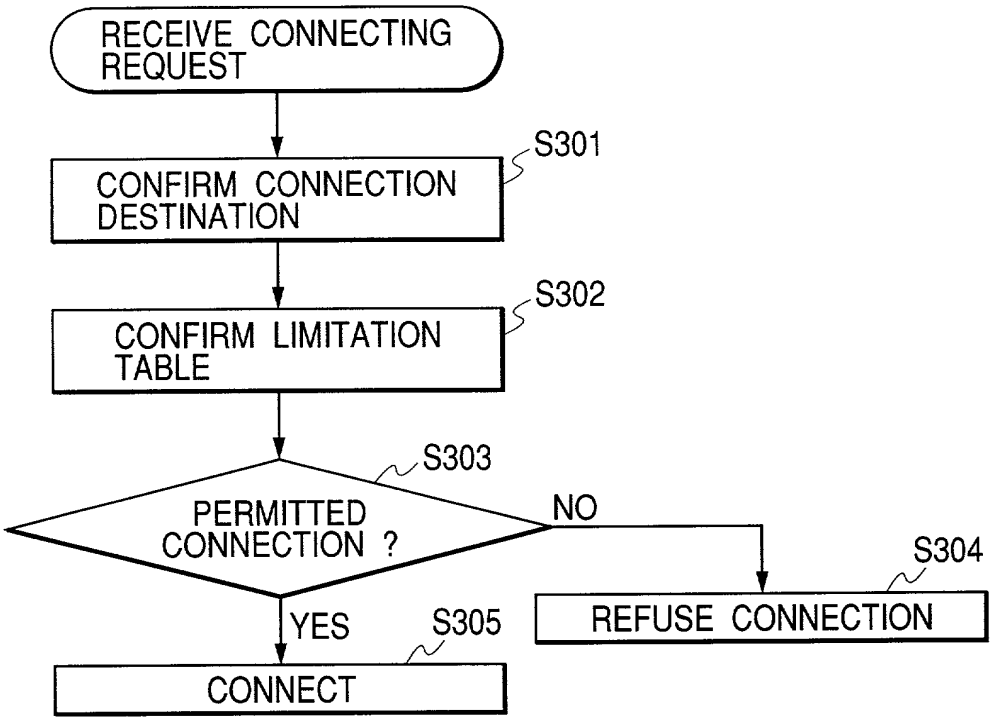

RECEIVE CONNECTING REQUEST
S301
CONFIRM CONNECTION DESTINATION
S302
CONFIRM LIMITATION TABLE
S303
PERMITTED CONNECTION ?
NO
S304
REFUSE CONNECTION
YES
S305
CONNECT

FIG. 4

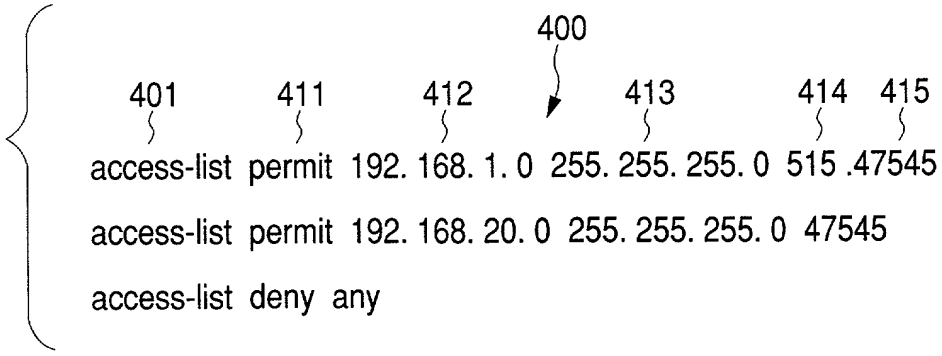

400
401
411
412
413
414
415
access-list permit 192. 168. 1. 0 255. 255. 255. 0 515 .47545
access-list permit 192. 168. 20. 0 255. 255. 255. 0 47545
access-list deny any

FIG. 5

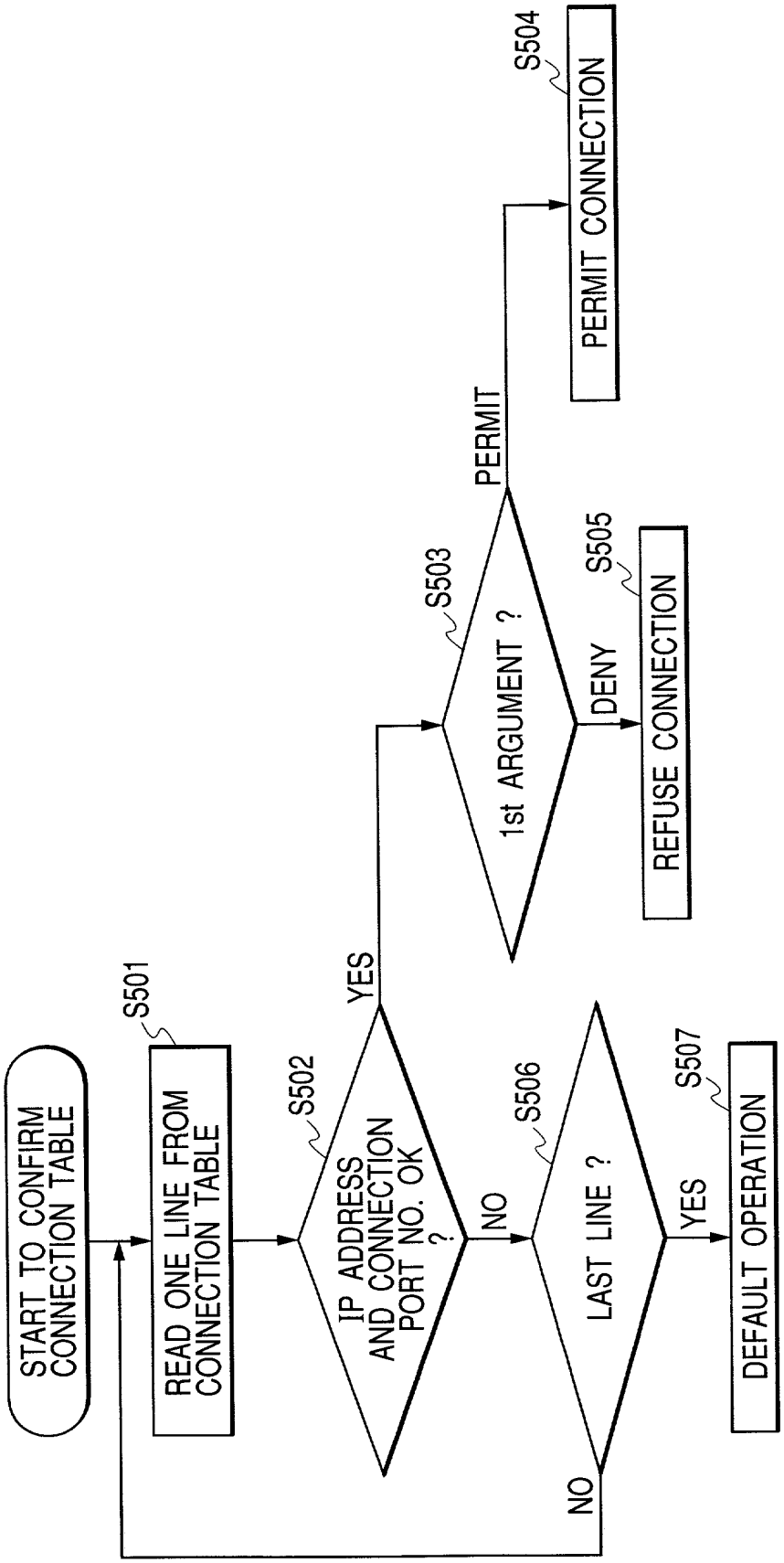

START TO CONFIRM CONNECTION TABLE
S501
READ ONE LINE FROM CONNECTION TABLE
S502
IP ADDRESS AND CONNECTION PORT NO. OK ?
YES
NO
S503
1st ARGUMENT ?
PERMIT
DENY
S504
PERMIT CONNECTION
S505
REFUSE CONNECTION
S506
LAST LINE ?
NO
YES
S507
DEFAULT OPERATION

FIG. 6

600

DEFAULT OPERATION DESIGNATION	:	CONNECTION PERMISSION (CONNECTION REFUSAL)

FIG. 7

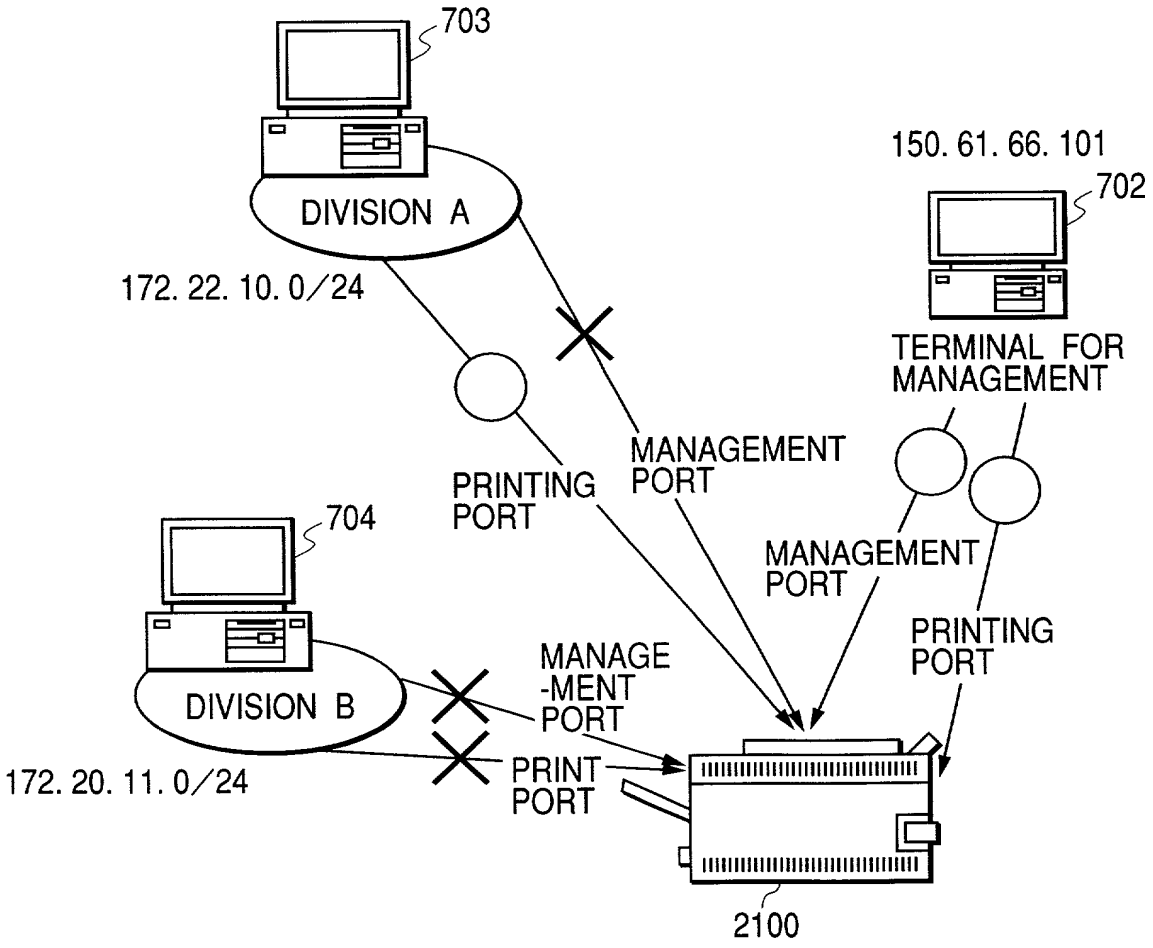


FIG. 8

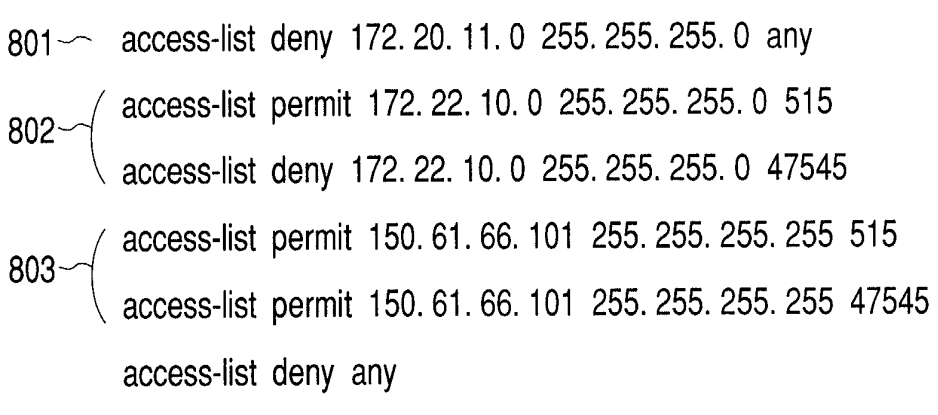

801
access-list deny 172. 20. 11. 0 255. 255. 255. 0 any
802
access-list permit 172. 22. 10. 0 255. 255. 255. 0 515
access-list deny 172. 22. 10. 0 255. 255. 255. 0 47545
803
access-list permit 150. 61. 66. 101 255. 255. 255. 255 515
access-list permit 150. 61. 66. 101 255. 255. 255. 255 47545
access-list deny any

FIG. 9

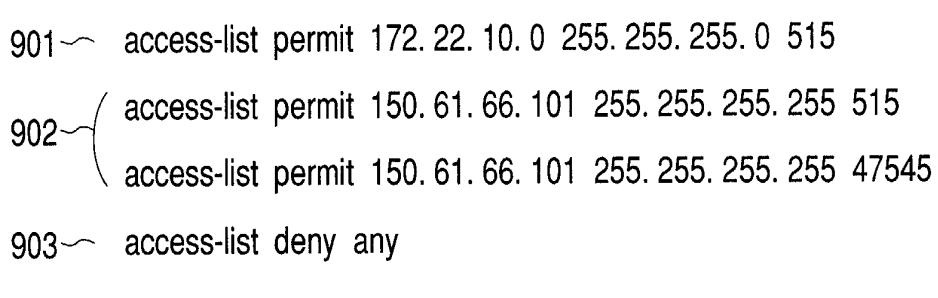

901
access-list permit 172. 22. 10. 0 255. 255. 255. 0 515
902
access-list permit 150. 61. 66. 101 255. 255. 255. 255 515
access-list permit 150. 61. 66. 101 255. 255. 255. 255 47545
903
access-list deny any

FIG. 10

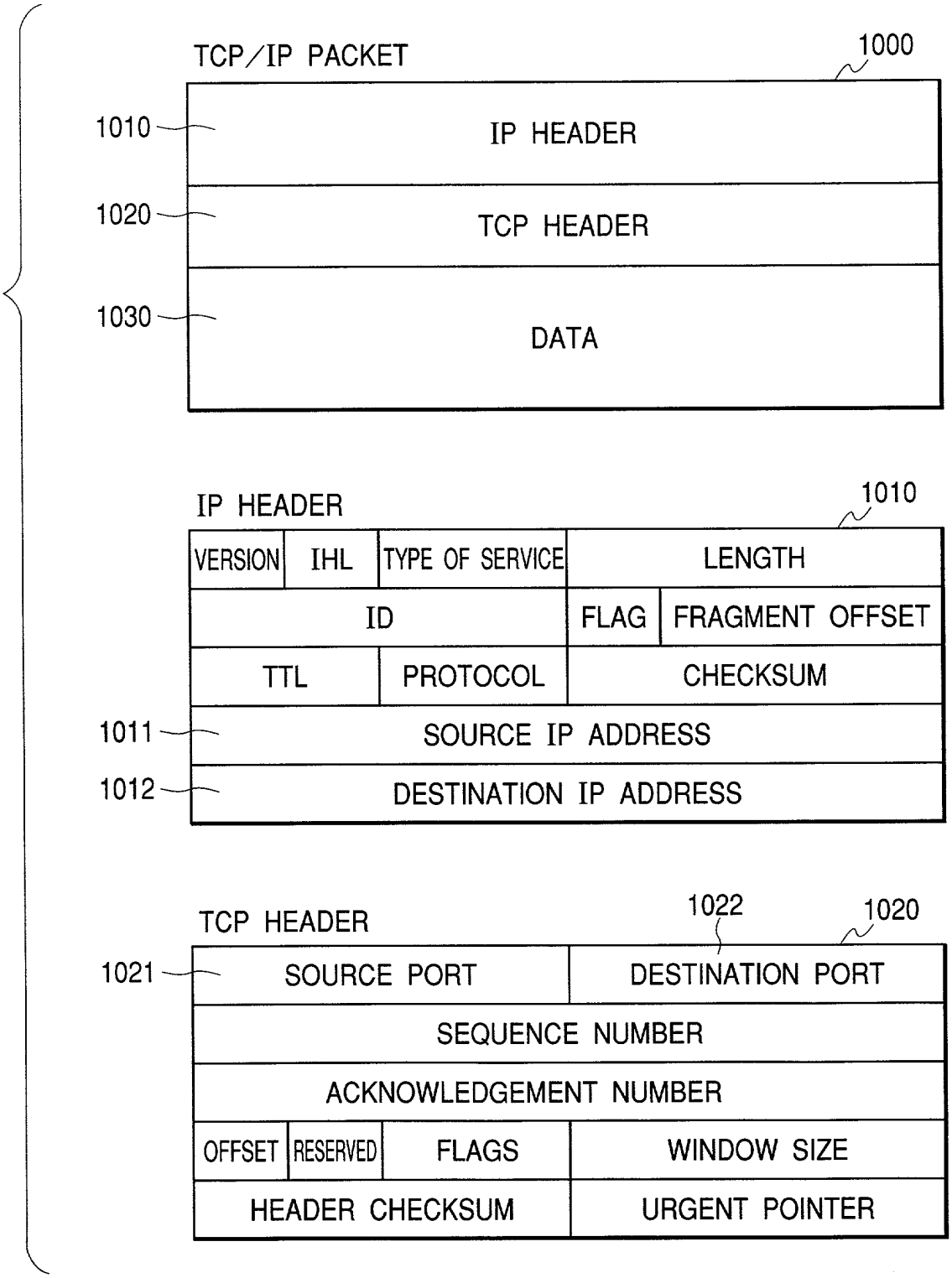

TCP/IP PACKET
1000
1010
IP HEADER
1020
TCP HEADER
1030
DATA
IP HEADER
1010
VERSION
IHL
TYPE OF SERVICE
LENGTH
ID
FLAG
FRAGMENT OFFSET
TTL
PROTOCOL
CHECKSUM
1011
SOURCE IP ADDRESS
1012
DESTINATION IP ADDRESS
TCP HEADER
1022
1020
1021
SOURCE PORT
DESTINATION PORT
SEQUENCE NUMBER
ACKNOWLEDGEMENT NUMBER
OFFSET
RESERVED
FLAGS
WINDOW SIZE
HEADER CHECKSUM
URGENT POINTER

FIG. 11

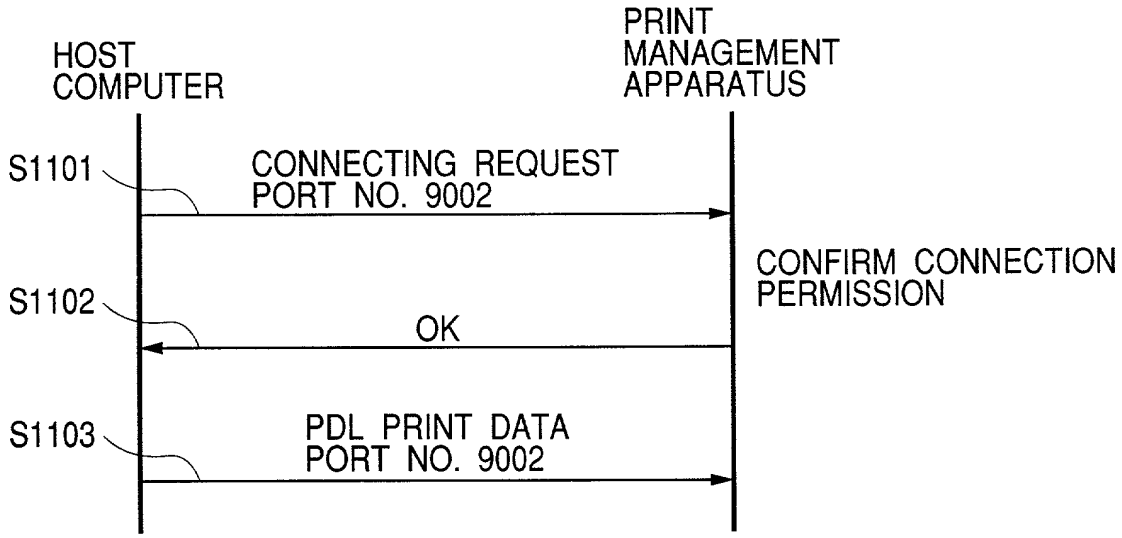

HOST COMPUTER
PRINT MANAGEMENT APPARATUS
S1101
CONNECTING REQUEST PORT NO. 9002
CONFIRM CONNECTION PERMISSION
S1102
OK
S1103
PDL PRINT DATA PORT NO. 9002

FIG. 12

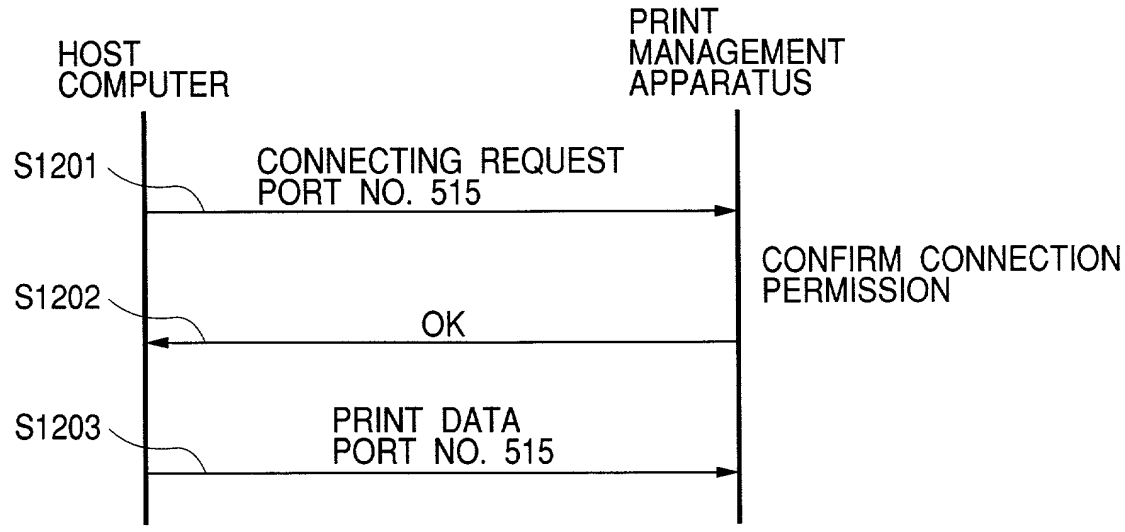
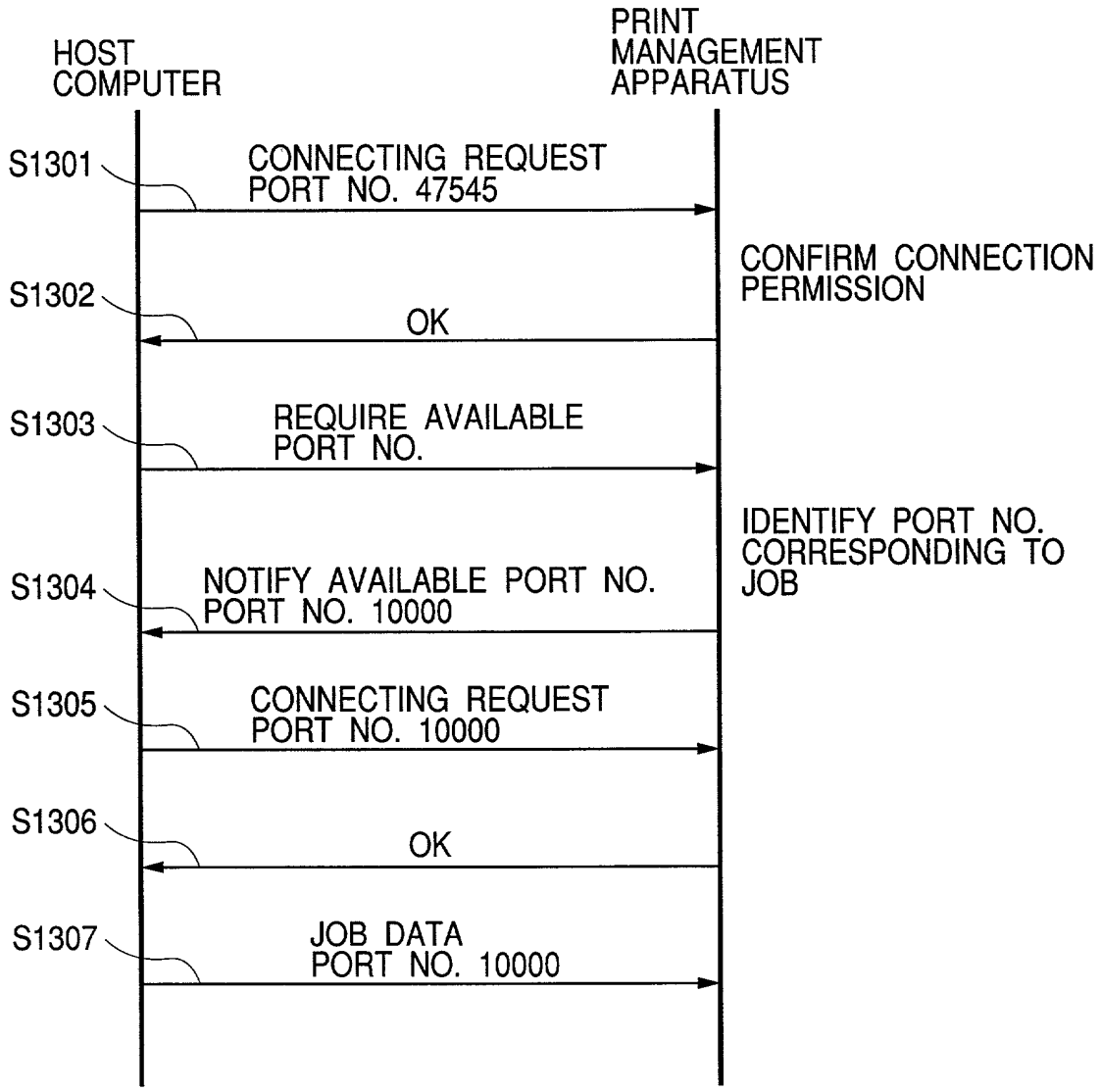

HOST COMPUTER
PRINT MANAGEMENT APPARATUS
S1201
CONNECTING REQUEST PORT NO. 515
CONFIRM CONNECTION PERMISSION
S1202
OK
S1203
PRINT DATA PORT NO. 515

FIG. 13


HOST COMPUTER
PRINT MANAGEMENT APPARATUS
S1301
CONNECTING REQUEST PORT NO. 47545
CONFIRM CONNECTION PERMISSION
S1302
OK
S1303
REQUIRE AVAILABLE PORT NO.
IDENTIFY PORT NO. CORRESPONDING TO JOB
S1304
NOTIFY AVAILABLE PORT NO. PORT NO. 10000
S1305
CONNECTING REQUEST PORT NO. 10000
S1306
OK
S1307
JOB DATA PORT NO. 10000